#### Remarks

Applicant thanks the Examiner for clarifying in a telephone conference December 11, 2003 that the Office Action mailed November 21, 2003 is non-final.

Applicant also thanks the Examiner for withdrawing the rejections of claims 1, 2, 15-22, 24, and 25 under 35 U.S.C. § 112, first and second paragraphs, and the rejection of claims 1, 2, 17-19, 24, and 25 under 35 U.S.C. § 102(b) over Chappel.

#### The Amendments

Claims 1, 15-17, and 25 have been amended to recite "euthyroid adult"; new claims 27-30 also contain this recitation. Recitation of "euthyroid" is supported *inter alia* by Example 4, in which a thyroid hormone lowering agent is administered to euthyroid B6 mice. Recitation of "adult" is supported *inter alia* by Example 2, which specifies that "[a]dult healer (MRL/<sup>+</sup>) and non-healer (C57Bl/6) mice (6-8 weeks of age) were anesthetized . . . ."

New claims 27-30 recite that the level of a T3 or T4 thyroid hormone is decreased by at least 90% (claim 27), 95% (claim 28), 99% (claim 29), and 100% (claim 30). These recitations are supported on page 5, lines 4-5: "Most preferably, thyroid hormone levels are decreased by at least 90%, 95%, 99%, or 100%."

The amendments do not add new matter.

#### **Unexamined Subject Matter**

Claims 1, 2, 15-19, 24, and 25 have been examined with respect to propylthiouracil as the elected species thyroid hormone-lowering agent (explicitly recited in claim 2). If the these claims are found allowable with respect to the elected species of propylthiouracil, Applicant respectfully requests that the patentability of claims 1, 15-19, 24, and 25 be considered with respect to the other species of thyroid hormone-lowering agent recited in claims 3-5. M.P.E.P. § 809.02(e).

## The Objection to Claim 21

Claim 21 is objected to as being of improper dependent form. Claim 21 has been canceled.

## The Rejection of Claim 22 Under 35 U.S.C. § 112, second paragraph

Claim 22 stands rejected under 35 U.S.C. § 112, second paragraph. To advance prosecution, claim 22 has been canceled.

## The Rejection of Claims 1, 2, 16-19, 21, 22, and 26 Under 35 U.S.C. § 102(b)

Claims 1, 2, 16-19, 21, 22, and 26 stand rejected under 35 U.S.C. § 102(b) as anticipated by Treadwell *et al.*, *Obstetrics and Gynecology* 87, 5 pt 2, pages 838-40, May 1996 ("Treadwell"). Claims 21, 22, and 26 have been canceled. Applicant respectfully traverses the rejection of independent claim 1 and dependent claims 2 and 16-19.

To anticipate a claim under 35 U.S.C. § 102, each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). Treadwell does not disclose each element of amended independent claim 1.

Claim 1 as amended recites "a step of administering to a first <u>euthyroid adult</u> mammal having a heart wound an amount of a thyroid hormone-lowering agent effective to decrease a level of a T3 or T4 thyroid hormone relative to the T3 or T4 thyroid hormone level in a second <u>euthyroid adult</u> mammal to whom the thyroid hormone-lowering agent has not been administered."

Treadwell is cited as disclosing a method of treating a human fetus having pericardial effusion by maternal administration of propylthiouracil. Office Action at page 4, first full paragraph. In Treadwell, the mother is treated with PTU to correct the hyperthryoidism and the direct thyroxin effects on the fetal heart. Amended independent claim 1, however, recites administration of a thyroid hormone-lowering agent to a euthyroid *adult* mammal. The fetus with pericardial effusion disclosed in Treadwell is not a euthyroid adult mammal. Thus, Treadwell does not anticipate the subject matter of independent claim 1 or dependent claims 2 and 16-19.

Treadwell also does not anticipate the subject matter of new claims 27-30. New claims 27-30 recite that the level of a T3 or T4 thyroid hormone is decreased by at least 90% (claim 27), 95% (claim 28), 99% (claim 29), and 100% (claim 30). Table 1 of Treadwell teaches reduction of T3 and T4 levels; none of these levels are reduced by at least 90% as recited in new claim 27. Thus, Treadwell also does not anticipate the subject matter of new claims 27-30.

Applicant respectfully requests withdrawal of the rejection.

# The Rejection of Claims 1, 2, 16-19, 21, and 23-26 Under 35 U.S.C. § 102(b)

Claims 1, 2, 16-19, 21, and 23-26 stand rejected under 35 U.S.C. § 102(b) as anticipated by Corte et al., Gass. Med. Ital. Arch. Aci. Med. 152, 149-53, 1993 ("Corte") as evidenced by Refetoff et al., Metabolism 32, 822-34, 1983 ("Refetoff"), Loos et al., Hormone and Metabolis Research 14, 85-93 ("Loos"), or Alain et al., Pediatrics 81, 674-79 ("Alain"). Claims 21, 23, and 26 have been canceled. Applicant respectfully traverses the rejection of independent claim 1 and dependent claims 2, 16-19, 24, and 25.

A printed publication that antedates an invention under 35 U.S.C. § 102 must disclose each element of the invention. *Kalman v. Kimberly-Clark Corp.*, 218 U.S.P.Q. 781, 789 (Fed. Cir. 1983), *cert. denied*, 465 U.S. 1026 (1984). Corte does not meet this standard.

Corte is cited as teaching increased healing of an ischemic heart in a human patient by administering propylthiouracil after ischemic injury occurred. Office Action at page 5. Corte, however, does not teach all the elements of amended independent claim 1. Independent claim 1 has been amended to recite that the thyroid hormone lowering agent is administered to a euthyroid adult mammal. Corte does not teach this element of amended claim 1.

The patient described in Corte was "a patient affected with hyperthroidism, who during a thyrotoxic crisis developed acute myocardial ischemia . . . ." Page 3, third paragraph of the translation. the patient was, therefore, not euthyroid. Corte does not teach administration of propylthiouracil to an adult euthyroid mammal. Thus, Corte does not anticipate the subject matter of independent claim 1 and dependent claims 2, 16-19, 24, and 25.

Applicant respectfully requests withdrawal of the rejection.

Respectfully submitted,

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